

**REMARKS**

This Preliminary Amendment revises claim 1 in accordance with the Amendment under PCT Article 34 that was made in the Japanese language during the international phase of the subject international application.

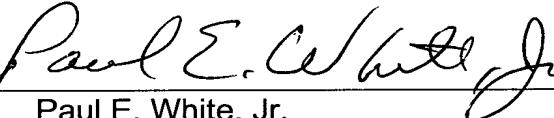
The specification has been amended as shown above to correct typographical errors that were made in producing the presently filed English translation from the original application filed in Japanese.

No new matter has been added.

Entry of this amendment and favorable consideration of this application are respectfully requested.

Respectfully submitted,

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## APPENDIX SHOWING REVISIONS OF SPECIFICATION AND CLAIMS

### Proposed Amendments To The Specification Showing Deletions And Insertions

#### **Paragraph at page 157, line 27 to page 158, line 1**

Physical property:

compound No. [1381] 1382 m.p. 164–166 . Yield 36%.

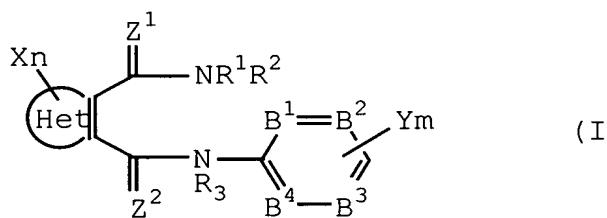
compound No. [1412] 1414 m.p. 167–169 . Yield 36%.

#### **Paragraph at page 163 starting at line 12 .**

As a result, the following compounds were found to have a corrected mortality of 90% or more: compound Nos. 13, 18, 32, 54, 55, 57, 127, 136, 230, 242, 258, 464, 484, 512, 524, 737, 785, 794, 795, 804, 805, 821, 989, 990, 1009, 1095, 1110, 1127, 1158, 1189, 1204, 1220, 1221, 1247, 1249, 1251, 1255, 1267, 1269, 1271, 1275, 1303, 1306, 1313, 1320, 1414, 1429, 1473, 1505, 1548 and [1540]  
1549.

### Proposed Amendments To Claim 1 Showing Deletions And Insertions.

1. A heterocyclic dicarboxylic acid diamide derivative represented by the general formula (I):



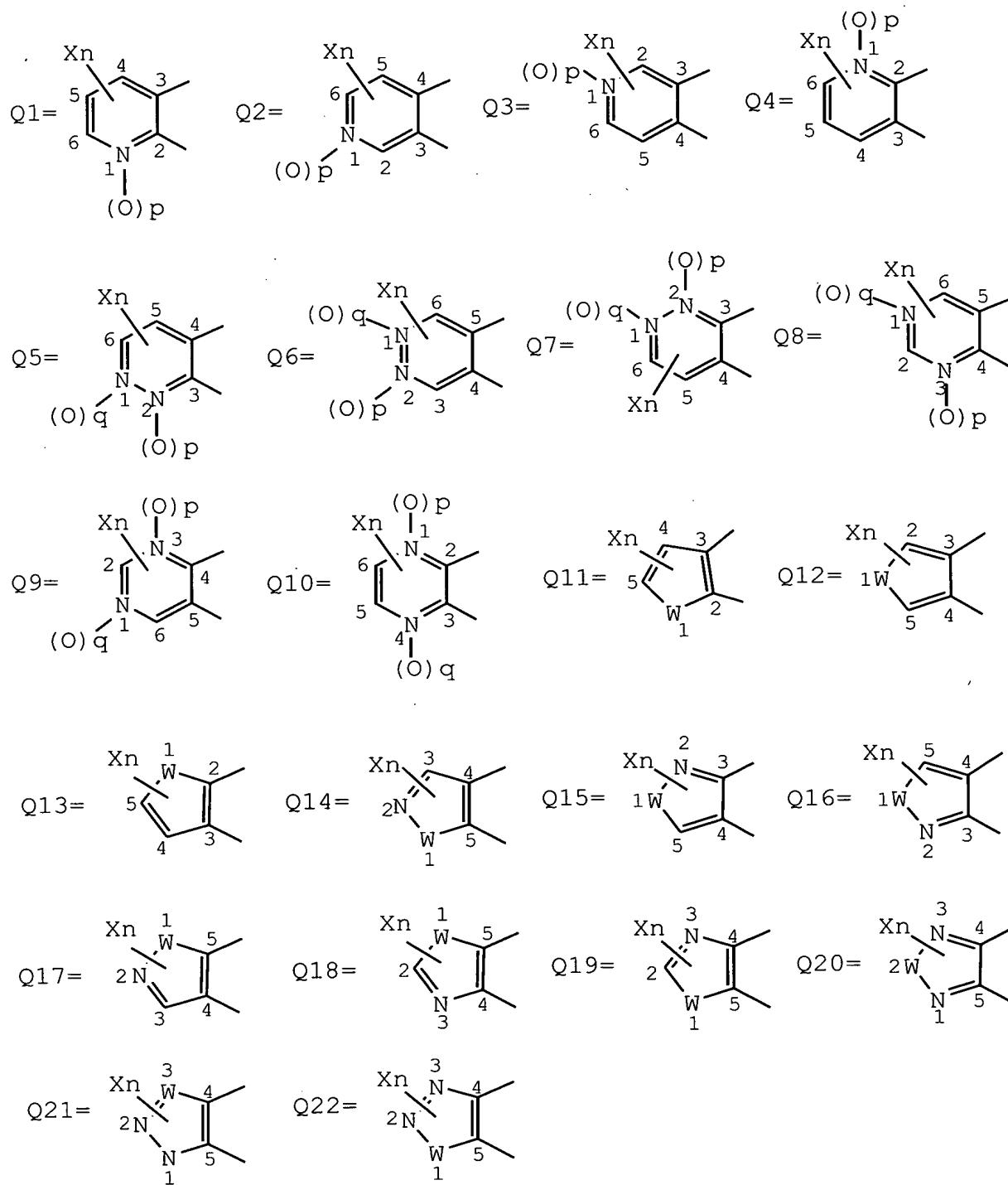
{wherein R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup>, which may be the same or different, are hydrogen atoms, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl groups, halo(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl groups or -A<sup>1</sup>-(R<sup>4</sup>)r (wherein A<sup>1</sup> is a (C<sub>1</sub>-C<sub>8</sub>)alkylene group, a (C<sub>3</sub>-C<sub>6</sub>)alkenylene group or a (C<sub>3</sub>-C<sub>6</sub>)alkynylene group, R<sup>4</sup>, which may be the same or different, are hydrogen atoms; halogen atoms; cyano groups; nitro groups; halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups; (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl groups; halo(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl groups; (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl groups; di(C<sub>1</sub>-C<sub>6</sub>)alkoxyphosphoryl groups whose (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups may be the same or different; di(C<sub>1</sub>-C<sub>6</sub>)alkoxythiophosphoryl groups whose (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups may be the same or different; diphenylphosphino groups; diphenylphosphono groups; phenyl groups; substituted phenyl groups having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; heterocyclic groups; substituted heterocyclic groups having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; or -A<sup>2</sup>-R<sup>5</sup> (wherein A<sup>2</sup> is -O-, -S-, -SO-, -SO<sub>2</sub>-, -N(R<sup>6</sup>)- (wherein R<sup>6</sup> is a hydrogen atom; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl group; a

halo(C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl group; a (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl group; a phenylcarbonyl group; a substituted phenylcarbonyl group having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; a phenyl(C<sub>1</sub>-C<sub>4</sub>)alkoxycarbonyl group; a substituted phenyl(C<sub>1</sub>-C<sub>4</sub>)alkoxycarbonyl group having on the ring one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl group; or a halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl group), -C(=O)— or -C(=NOR<sup>7</sup>)— (wherein R<sup>7</sup> is a hydrogen atom; a (C<sub>1</sub>-C<sub>6</sub>)alkyl group; a halo(C<sub>1</sub>-C<sub>6</sub>)alkyl group; a (C<sub>3</sub>-C<sub>6</sub>)alkenyl group; a halo(C<sub>3</sub>-C<sub>6</sub>)alkenyl group; a (C<sub>3</sub>-C<sub>6</sub>)alkynyl group; a cyclo(C<sub>3</sub>-C<sub>6</sub>)alkyl group; a phenyl(C<sub>1</sub>-C<sub>4</sub>)alkyl group; or a substituted phenyl(C<sub>1</sub>-C<sub>4</sub>)alkyl group having on the ring one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups), and R<sup>5</sup> is a hydrogen atom; a (C<sub>1</sub>-C<sub>6</sub>)alkyl group; a halo(C<sub>1</sub>-C<sub>6</sub>)alkyl group; a (C<sub>3</sub>-C<sub>6</sub>)alkenyl group; a halo(C<sub>3</sub>-C<sub>6</sub>)alkenyl group; a (C<sub>3</sub>-C<sub>6</sub>)alkynyl group; a halo(C<sub>3</sub>-C<sub>6</sub>)alkynyl group; a (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl group; a halo(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl group; a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl group; a (C<sub>1</sub>-C<sub>6</sub>)alkylthio(C<sub>1</sub>-C<sub>6</sub>)alkyl group; a

formyl group; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl group; a halo(C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl group; a (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl group; a mono(C<sub>1</sub>-C<sub>6</sub>)alkylaminocarbonyl group; a di(C<sub>1</sub>-C<sub>6</sub>)alkylaminocarbonyl group whose (C<sub>1</sub>-C<sub>6</sub>)alkyl groups may be the same or different; a mono(C<sub>1</sub>-C<sub>6</sub>)alkylaminothiocarbonyl group; a di(C<sub>1</sub>-C<sub>6</sub>)alkylaminothiocarbonyl group whose (C<sub>1</sub>-C<sub>6</sub>)alkyl groups may be the same or different; a di(C<sub>1</sub>-C<sub>6</sub>)alkoxyphosphoryl group whose (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups may be the same or different; a di(C<sub>1</sub>-C<sub>6</sub>)alkoxythiophosphoryl group whose (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups may be the same or different; a phenyl group; a substituted phenyl group having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; a phenyl(C<sub>1</sub>-C<sub>4</sub>)alkyl group; a substituted phenyl(C<sub>1</sub>-C<sub>4</sub>)alkyl group having on the ring one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; a heterocyclic group; or a substituted heterocyclic group having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups), and r is an integer of 1 to 4),

provided that R<sup>1</sup> and R<sup>2</sup> are not hydrogen atoms at the same time,  
R<sup>1</sup> and R<sup>2</sup> may form a 4 to 7 membered ring by combining to each  
other, in which the ring may contain the same or different 1 to 3 hetero atoms  
selected from the group consisting of oxygen atom, sulfur atom and nitrogen atom,

Het is a heterocyclic group represented by any of the following  
formulas Q1 to Q22:



(wherein X, which may be the same or different, are halogen atoms; cyano groups; nitro groups; (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl groups; halo(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl groups; tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilyl groups whose (C<sub>1</sub>-C<sub>6</sub>)alkyl groups may be the same or different; phenyl groups; substituted phenyl groups having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; heterocyclic groups; substituted heterocyclic groups having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; or -A<sup>3</sup>-R<sup>8</sup> [wherein A<sup>3</sup> is -O-, -S-, -SO-, -SO<sub>2</sub>-, -N(R<sup>6</sup>)- (wherein R<sup>6</sup> is as defined above), -C(=O)-, -C(=NOR<sup>7</sup>)- (wherein R<sup>7</sup> is as defined above), a (C<sub>1</sub>-C<sub>6</sub>)alkylene group, a halo(C<sub>1</sub>-C<sub>6</sub>)alkylene group, a (C<sub>2</sub>-C<sub>6</sub>)alkenylene group, a halo(C<sub>2</sub>-C<sub>6</sub>)alkenylene group, a (C<sub>2</sub>-C<sub>6</sub>)alkynylene group or a halo(C<sub>3</sub>-C<sub>6</sub>)alkynylene group, and R<sup>8</sup> is as follows:

(1) when A<sup>3</sup> is -O-, -S-, -SO-, -SO<sub>2</sub>- or -N(R<sup>6</sup>)- (wherein R<sup>6</sup> is as defined above), then R<sup>8</sup> is a halo(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl group; a halo(C<sub>3</sub>-C<sub>6</sub>)cycloalkenyl group; a phenyl group; a substituted phenyl group having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl



(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups)),

(2) when A<sup>3</sup> is -C(=O)- or -C(=NOR<sup>7</sup>)- (wherein R<sup>7</sup> is as defined above), then R<sup>8</sup> is a hydrogen atom; a (C<sub>1</sub>-C<sub>6</sub>)alkyl group; a halo(C<sub>1</sub>-C<sub>6</sub>)alkyl group; a (C<sub>2</sub>-C<sub>6</sub>)alkenyl group; a halo(C<sub>2</sub>-C<sub>6</sub>)alkenyl group; a (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl group; a halo(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl group; a (C<sub>1</sub>-C<sub>6</sub>)alkoxy group; a (C<sub>1</sub>-C<sub>6</sub>)alkylthio group; a mono(C<sub>1</sub>-C<sub>6</sub>)alkylamino group; a di(C<sub>1</sub>-C<sub>6</sub>)alkylamino group whose (C<sub>1</sub>-C<sub>6</sub>)alkyl groups may be the same or different; a phenyl group; a substituted phenyl group having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; a phenylamino group; a substituted phenylamino group having on the ring one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; a heterocyclic group; or a substituted heterocyclic group having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups).

groups, and

(3) when A<sup>3</sup> is a (C<sub>1</sub>-C<sub>6</sub>)alkylene group, a halo(C<sub>1</sub>-C<sub>6</sub>)alkylene group, a (C<sub>2</sub>-C<sub>6</sub>)alkenylene group, a halo(C<sub>2</sub>-C<sub>6</sub>)alkenylene group, a (C<sub>2</sub>-C<sub>6</sub>)alkynylene group or a halo(C<sub>3</sub>-C<sub>6</sub>)alkynylene group, then R<sup>8</sup> is a hydrogen atom; a halogen atom; a (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl group; a halo(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl group; a (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl group; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilyl group whose (C<sub>1</sub>-C<sub>6</sub>)alkyl groups may be the same or different; a phenyl group; a substituted phenyl group having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; a heterocyclic group; a substituted heterocyclic group having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; or -A<sup>6</sup>-R<sup>11</sup> (wherein A<sup>6</sup> is -O-, -S-, -SO- or -SO<sub>2</sub>-, and R<sup>11</sup> is a (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl group; a halo(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl group; a phenyl group; a substituted phenyl group having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; a heterocyclic group; a substituted heterocyclic group having one or more substituents which may be the same or different and are selected from halogen



$C_6$ )alkylsulfonyl groups and halo( $C_1$ - $C_6$ )alkylsulfonyl groups; a heterocyclic group; or a substituted heterocyclic group having one or more substituents which may be the same or different and are selected from halogen atoms, ( $C_1$ - $C_6$ )alkyl groups, halo( $C_1$ - $C_6$ )alkyl groups, ( $C_1$ - $C_6$ )alkoxy groups, halo( $C_1$ - $C_6$ )alkoxy groups, ( $C_1$ - $C_6$ )alkylthio groups, halo( $C_1$ - $C_6$ )alkylthio groups, ( $C_1$ - $C_6$ )alkylsulfinyl groups, halo( $C_1$ - $C_6$ )alkylsulfinyl groups, ( $C_1$ - $C_6$ )alkylsulfonyl groups and halo( $C_1$ - $C_6$ )alkylsulfonyl groups)], and n is an integer of 0 to 3,

X may form a condensed ring by combining together with the adjacent atoms in the heterocyclic ring, and said condensed ring may have one or more substituents, which may be the same or different, and are selected from halogen atoms; ( $C_1$ - $C_6$ )alkyl groups; halo( $C_1$ - $C_6$ )alkyl groups; ( $C_1$ - $C_6$ )alkoxy groups; halo( $C_1$ - $C_6$ )alkoxy groups; ( $C_1$ - $C_6$ )alkylthio groups; halo( $C_1$ - $C_6$ )alkylthio groups; ( $C_1$ - $C_6$ )alkylsulfinyl groups; halo( $C_1$ - $C_6$ )alkylsulfinyl groups; ( $C_1$ - $C_6$ )alkylsulfonyl groups; halo( $C_1$ - $C_6$ )alkylsulfonyl groups; phenyl group; substituted phenyl groups having one or more substituents which may be the same or different and are selected from halogen atoms, ( $C_1$ - $C_6$ )alkyl groups, halo( $C_1$ - $C_6$ )alkyl groups, ( $C_1$ - $C_6$ )alkoxy groups, halo( $C_1$ - $C_6$ )alkoxy groups, ( $C_1$ - $C_6$ )alkylthio groups, halo( $C_1$ - $C_6$ )alkylthio groups, ( $C_1$ - $C_6$ )alkylsulfinyl groups, halo( $C_1$ - $C_6$ )alkylsulfinyl groups, ( $C_1$ - $C_6$ )alkylsulfonyl groups and halo( $C_1$ - $C_6$ )alkylsulfonyl groups; heterocyclic groups; and substituted heterocyclic groups having one or more substituents which may be the same or different and are selected from halogen atoms, ( $C_1$ - $C_6$ )alkyl groups, halo( $C_1$ - $C_6$ )alkyl groups, ( $C_1$ - $C_6$ )alkoxy groups, halo( $C_1$ - $C_6$ )alkoxy groups, ( $C_1$ - $C_6$ )alkylthio groups, halo( $C_1$ - $C_6$ )alkylthio groups, ( $C_1$ - $C_6$ )alkylsulfinyl groups, halo( $C_1$ - $C_6$ )alkylsulfinyl groups, halo( $C_1$ - $C_6$ )alkylsulfonyl groups, ( $C_1$ - $C_6$ )alkylsulfonyl groups and halo( $C_1$ - $C_6$ )alkylsulfonyl groups,

W is O, S or N—R<sup>13</sup> (wherein R<sup>13</sup> is a ( $C_1$ - $C_6$ )alkyl group; a halo( $C_1$ -

(C<sub>6</sub>)alkyl group; a (C<sub>3</sub>-C<sub>6</sub>)alkenyl group; a halo(C<sub>3</sub>-C<sub>6</sub>)alkenyl group; a (C<sub>3</sub>-C<sub>6</sub>)alkynyl group; a halo(C<sub>3</sub>-C<sub>6</sub>)alkynyl group; a (C<sub>1</sub>-C<sub>6</sub>)alkoxy group; a phenyl group; a substituted phenyl group having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; a phenyl(C<sub>1</sub>-C<sub>6</sub>)alkyl group; or a substituted phenyl(C<sub>1</sub>-C<sub>6</sub>)alkyl group having on the ring one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups), and p and q, which may be the same or different, are integers of 0 to 1),

B<sup>1</sup>, B<sup>2</sup>, B<sup>3</sup> and B<sup>4</sup>, which may be the same or different, are carbon atoms or nitrogen atoms,

Y, which may be the same or different, are halogen atoms; cyano groups; nitro groups; halo(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl groups; phenyl groups; substituted phenyl groups having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; heterocyclic groups; substituted heterocyclic groups having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups;

(C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; or —A<sup>3</sup>—R<sup>8</sup> (wherein A<sup>3</sup> and R<sup>8</sup> are as defined above), and m is an integer of 1 to 5,

Y may form a condensed ring by combining together with the adjacent carbon atoms in the aromatic ring, and said condensed ring may have one or more substituents, which may be the same or different, and are selected from halogen atoms; (C<sub>1</sub>-C<sub>6</sub>)alkyl groups; halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups; (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups; halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups; (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups; halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups; (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups; halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups; (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; phenyl group; substituted phenyl groups having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups; heterocyclic groups; and substituted heterocyclic groups having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups, and each of Z<sup>1</sup> and Z<sup>2</sup> is an oxygen atom or a sulfur atom,

provided that:

(1) when Het is Q2, Q6, Q7 or Q9 and B<sup>1</sup>, B<sup>2</sup>, B<sup>3</sup> and B<sup>4</sup> are carbon atoms at the

same time, then Ym is other than 3-chloro-2-methyl group, 3-chloro-2,6-diethyl group, 5-chloro-2-methyl group, 2,6-diethyl group, 4-chloro-2-fluoro group and 2-ethyl-6-methyl group,

(2) when Het is Q4 and B<sup>1</sup>, B<sup>2</sup>, B<sup>3</sup> and B<sup>4</sup> are carbon atoms at the same time, then Ym is other than 2,5-dichloro group, 2,4-difluoro group, 2,6-difluoro group, 3-chloro-2-methyl group, 5-chloro-2-methyl group, 5-fluoro-2-methyl group, 2,6-dimethyl group, 2,6-diethyl group, 2-ethyl-6-methyl group, 2-methoxy-5-nitro group, 2-methoxy-5-methyl group, 2,6-diethoxy group, 3-bromo-2-methyl group, 3-fluoro-2-methyl group, 3-iodo-2-methyl group, 3-cyano-2-methyl group, 3-difluoromethoxy-2-methyl group, 5-chloro-2-ethyl group, 2,5-dimethyl group, 2,3-dichloro group, 3-chloro-2,6-diethyl group, 4-trifluoromethyl group, 3-methoxycarbonyl-2-methyl group, 3-trifluoromethyl-2-methyl group, 3,5-dichloro-2,6-diethyl group, 3,4-dichloro group, 3-(methoxycarbonylmethoxy)-2-methyl group, 2-methyl-3-nitro group and 4-trifluoromethoxy group,

(3) when Het is Q9, R<sup>2</sup> and R<sup>3</sup> are hydrogen atoms at the same time, Xn is a 2-phenyl group, R<sup>1</sup> is a n-propyl group or an i-propyl group and B<sup>1</sup>, B<sup>2</sup>, B<sup>3</sup> and B<sup>4</sup> are carbon atoms at the same time, then Ym is other than 4-pentafluoroethyl-2-methyl group, and

(4) when Het is Q10 and B<sup>1</sup>, B<sup>2</sup>, B<sup>3</sup> and B<sup>4</sup> are carbon atoms at the same time, then Ym is other than 5-chloro-2-methyl group, 5-fluoro-2-methyl group [and] , 2,5-dimethyl group and 2,6-diethyl group, and

(5) when Het is Q10 and B<sup>1</sup>, B<sup>2</sup>, B<sup>3</sup> and B<sup>4</sup> are carbon atoms at the same time, Xn is other than 5,6-dimethyl group }.